

Supporting STAAR Achievement in Science, Biology			
Lesson Title	Revised 2020 TEKS	2010 TEKS	Alignment
<b>*Alignment refers to the content within the student expectation, not to three-dimensional instruction.</b>			
<b>Cell Transport</b>	B.5(C) investigate homeostasis through the cellular transport of molecules; and	B.4(B)	Aligned
<b>Cellular Energy Conversions</b>	B.11(A) explain how matter is conserved and energy is transferred during photosynthesis and cellular respiration using models, including the chemical equations for these processes; and	B.4(B)	Aligned <i>*Specific emphasis on matter being conserved is not addressed. Adding facilitation questions would address the full student expectation.</i>
<b>DNA</b>	B.7(A) identify components of DNA, explain how the nucleotide sequence specifies some traits of an organism, and examine scientific explanations for the origin of DNA; B.7(B) describe the significance of gene expression and explain the process of protein synthesis using models of DNA and ribonucleic acid (RNA);	B.6(A) B.6(C)	Aligned
<b>Predicting Genetic Outcomes</b>	B.8(B) predict possible outcomes of various genetic combinations using monohybrid and dihybrid crosses, including non-Mendelian traits of incomplete dominance, codominance, sex-linked traits, and multiple alleles.	B.6(F)	Aligned
<b>Evolution – Molecular and Biogeographical Evidence</b>	B.9(A) analyze and evaluate how evidence of common ancestry among groups is provided by the fossil record, biogeography, and homologies, including anatomical, molecular, and developmental; and	B.7(A)	Aligned
<b>Natural Selection</b>	B.10(A) analyze and evaluate how natural selection produces change in populations and not in individuals;	B.8(A)	Aligned
<b>Interactions of Animal Systems</b>	B.12(A) analyze the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals; and;	B.10(A)	Aligned
<b>Flow of Matter and Energy</b>	B.13(B) analyze how ecosystem stability is affected by disruptions to the cycling of matter and flow of energy through trophic levels using models;	B.12(C)	Aligned
<b>Biological Relationships</b>	B.13(A) investigate and evaluate how ecological relationships, including predation, parasitism, commensalism, mutualism, and competition, influence ecosystem stability; B.13(C) explain the significance of the carbon and nitrogen cycles to ecosystem stability and analyze the consequences of disrupting these cycles; and	B.12(A)	Aligned <i>*Specific emphasis on how ecological relationships influence ecosystem stability is not addressed in each type of relationship. Adding additional facilitation questions about the effect relationships on ecosystem stability will address the complete student expectation.</i>